ABSTRACT

Disclosed are recombinant vectors encoding immunoglobulin-like domains and portions thereof, such as antibody Fc-hinge fragments, subfragments and mutant domains with extended biological half lives. Methods of producing large quantities of such domains, heterodimers, and fusion proteins following expression by host cells are also reported. Described are antibody Fc and Fc-hinge domains, which have the same *in vivo* stability as intact antibodies; and domains engineered to have increased *in vivo* half lives. These DNA constructs and protein domains will be useful as templates for *in vitro* mutagenesis and high resolution structural studies; for immunization and vaccination; and for the production of recombinant antibodies or chimeric proteins with increased stability and longevity for therapeutic and diagnostic uses.